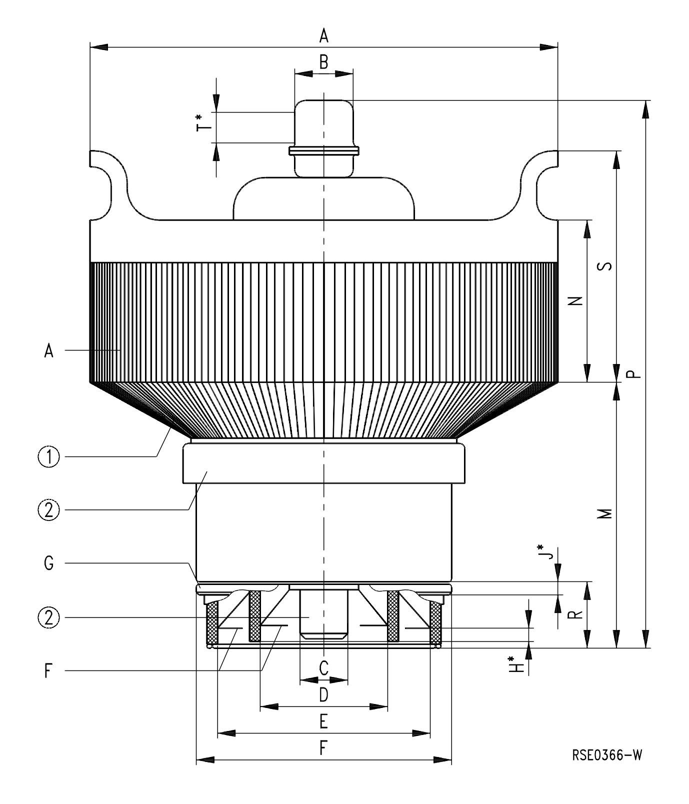
Ordering code Q51-X701

Coaxial metal-ceramic power triode, forced-air-cooled, intended to be used as a zero-bias class-B amplifier in audio or radio-frequency applications up to 25 kW power output.



Dimensional data

	min	max
A	175,97	179,07
B	21,72	25,49
C	18,29	19,30
D	48,16	49,17
E	79,58	80,59
F	96,32	97,33
H	4,77	
J	4,77	
M	100,33	109,22
N	61,26	70,81
P	209,55	222,25
R	25,04	26,67
S	86,66	96,21
T	9,52	

Dimensions in mm

① Air inlet
② Do not use as terminal

Approx. weight 5,5 kg

Heating

Heater voltage	U_F	7,5	V
Heater current	I_F	≈ 100	A
Heating: direct			
Cathode: thoriated tungsten			

Characteristics

Transconductance at U_A = 5 kV, I_A = 5 A	s	55	mA/V

Capacitances

Cathode/grid	c_{kg}	≈ 59	pF
Cathode/anode	c_{ka}	≈ 0,2	pF
Grid/anode	c_{ga}	≈ 36	pF

Accessories		**Ordering code**
Socket	RöFsg215	Q81-X641
Air duct	RöAnst215	Q81-X633

**Anode modulation,
class C operation**

Maximum ratings

Frequency	f	160	MHz
Anode voltage (dc)	U_A	6,5	kV
Grid voltage (dc)	U_G	– 500	V
Anode current (dc)	I_A	3,0	A
Anode dissipation	P_A	10	kW
Grid dissipation	P_G	500	W

Operating characteristics

Frequency	f	≤ 30	MHz
Carrier power	P_{trg}	11,9	kW
Anode voltage (dc)	U_A	5,0	kV
Grid bias (dc)	U_G	– 200	V
Peak grid voltage (ac)	$U_{g\,m}$	490	V
Anode current (dc)	I_A	3,0	A
Grid current (dc)	I_G	0,8	A
Anode input power	$P_{B\,A}$	15	kW
Drive power	P_1	380	W
Anode dissipation	P_A	3,1	kW
Grid dissipation	P_G	220	W
Efficiency	η	79	%
Anode load resistance	R_A	825	Ω

$U_{KG} = f\,(U_{AG})$ Parameter = I_A ————————
Parameter = I_G —·—·—·—·—·—·—

